

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

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In Re VALE S.A. SECURITIES LITIGATION

MEMORANDUM & ORDER

19 CV 526 (RJD) (SJB)

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DEARIE, District Judge

The Colleges of Applied Arts and Technology Pension Plan (“Plaintiff”) brings this suit on behalf of all persons who purchased certain publicly traded Vale securities¹ between July 28, 2016 and February 6, 2019 (“Class Period”), against Vale S.A. (“Vale” or “Company”) and several Vale executives (collectively, “Defendants”), under Sections 10(b) and 20(a) of the Securities Exchange Act (“Exchange Act”). Plaintiff alleges that Defendants materially misrepresented or omitted facts in public filings related to the stability and safety of Vale’s dams, the sufficiency of Vale’s dam risk management and sustainability policies and practices, and Vale’s compliance with regulatory and internal safety standards. Vale seeks dismissal for failure to state a claim under Federal Rule of Civil Procedure 12(b)(6). The motion is DENIED.

FACTUAL BACKGROUND

This securities fraud case arises out of the January 25, 2019 collapse of Dam 1 of the Córrego do Feijão iron ore mine in Minas Gerais, Brazil (“Dam 1” or “B1”). The catastrophic breach unleashed a “torrent of mud,” killing approximately 270 people, destroying hundreds of forest acres, and contaminating the Paraopeba River. Compl., Dkt. No. 47, ¶ 3. The following is a summary of the factual allegations in the Consolidated Class Action Complaint (“Complaint”),

¹ The securities at issue are Vale American Depositary Shares (“Vale ADSs”), 5.875% Guaranteed Notes due 2021, 4.375% Guaranteed Notes due 2022, 6.250% Guaranteed Notes due 2026, 8.250% Guaranteed Notes due 2034, 6.875% Guaranteed Notes due 2036, 6.875% Guaranteed Notes due 2039, and 5.625% Notes due 2042 (collectively, “Vale Securities”). Compl., Dkt. No. 47, ¶¶ 2, 221.

which the Court accepts as true for the purpose of this motion. See Freidus v. Barclays Bank PLC, 734 F.3d 132, 137 (2d Cir. 2013) (citations omitted).

1. Relevant Vale Actors

Dam 1 was owned by Defendant Vale, a multinational metals and mining company incorporated and headquartered in Brazil. Compl. ¶ 35. Defendant Murilo Ferreira (“Ferreira”) was Vale’s Chief Executive Officer (“CEO”) from May 2011 to May 2017 and was replaced by Defendant Fabio Schvartsman (“Schvartsman”), who served as CEO from May 2017 to March 2019. Id. ¶¶ 7, 36-37. Defendant Luciano Siani Pires (“Siani”) was Vale’s Executive Director of Finance and Investor Relations throughout the Class Period, as well as the head of Vale’s Business Risk Management division and chair of Vale’s Executive Risk Committee. Id. ¶¶ 23, 38. During the Class Period, Defendants Ferreira, Schvartsman, and Siani signed Vale’s annual reports and annual certifications attesting to their accuracy. Id. ¶¶ 36-38. Defendant Gerd Peter Poppinga (“Poppinga”) was Vale’s Executive Director of Ferrous Minerals and Coal from July 2017 to March 2019 and established a “dam management” division that reported to him. Id. ¶¶ 10, 39. Defendant Luiz Eduardo Froes do Amaral Osorio (“Osorio”) has been Vale’s Executive Director of Sustainability and International Business since July 2017. Id. ¶ 40.

2. Background on Dam 1

Dam 1 was an upstream tailings dam. Id. ¶ 48. Tailings are the waste product that remain after valuable mining products, here iron ore fines and pellets, are separated from mined material. Id. ¶ 49. At the time of collapse, Dam 1 was 86 meters high and contained a volume of 11.7 million cubic meters of stored tailings that occupied an area of 249.5 thousand square meters. Id. ¶ 53.

Dam 1 was built in 1976 and acquired by Vale on April 27, 2001. Id. Between 1982 and 2013, it was expanded—or “raised”—ten times. Id. There are multiple methods for building and raising tailings dams, with the upstream method used for Dam 1 being the cheapest and most susceptible to failure. Id. ¶¶ 48, 50-51. In 2012 Vale hired a consulting company to develop a plan to close Dam 1 and remove waste, but the project was put on hold once ore prices declined. Id. ¶ 62. Vale has no record of an internal drainage system in Dam 1 from when it was created and first raised, and the subsequent five raises deviated from their design plans without documenting the design modifications. Id. ¶ 61. Accurate information about the internal drainage system was important in assessing options for reducing Dam 1’s water content. Id. Water content in a dam is “a major cause of liquefaction,” a phenomenon where solids act like liquids and a common cause of tailings dam failures. Id. ¶¶ 10 n.7, 52, 61. Liquefaction is believed to have caused Dam 1’s collapse. Id. ¶ 10 n.7.

3. The Mariana Dam Collapse and Policy Changes

On November 5, 2015, a different upstream tailings dam co-owned by Vale collapsed in Mariana, Minas Gerais, Brazil due to liquefaction. Id. ¶¶ 10 n.7, 58. The collapse released a wave of mud, burying a town, creating a toxic plume, and killing nineteen people who received no warning due to failed alarm sirens. Id. ¶ 58.

On December 18, 2015, a little over a month after the Mariana dam collapse, Vale obtained a risk analysis for Dam 1 from Pimenta de Ávila Consultoria. Id. ¶ 63. It indicated a range of failure probabilities using different methodologies, the highest being a 50% failure probability. Id. The analyses were based on geotechnical measurements from 2006, and the consultant recommended that Vale collect updated data and reassess. Id.

The Mariana dam collapse catalyzed increased scrutiny of upstream tailings dams in Brazil. Id. ¶ 60. In May 2017, Brazil implemented “new legal obligations for companies operating mining dams in Brazil, including: (1) conducting a Regular Dam Safety Inspection semiannually and submitting a Stability Condition Statement (“DCE”) after each inspection; (2) conducting Periodic Dam Safety Reviews with documented hazards and failure impact studies; (3) conducting semi-annual emergency action plan trainings for high risk dams[;] and (4) installing video monitoring for all high-risk dams by June 2019.” Id. ¶ 55. This regulatory regime mainly relied on self-reporting. Id. The DCE is a sworn statement attesting to a dam’s structural integrity signed by the dam inspector and the dam owner. Id. ¶ 56. The primary metric used to determine if an auditor can issue a DCE is the factor of safety, or ratio of a dam’s resistance to load. Id. ¶ 56. A mean factor of safety of 1 indicates that resistance equals load and implies a 50% probability of failure. Id.

After the Mariana dam collapse, Vale implemented organizational changes. Id. ¶ 5. It created the Geotechnical Risk Management department as a “first line of defense” to audit and standardize dam management. Id. ¶¶ 5, 64. Alexandre Campanha headed the department and reported to Lucio Cavalli. Id. ¶ 64. Cavalli reported to Defendant Poppinga. Id. Vale established, as a “second line of defense,” the Business Risk Management unit (“GRN”), which analyzed dam and business risks and maintained a risk matrix assessing certain tailings dams’ breach risks. Id. The GRN reported to Defendant Siani. Id. ¶¶ 64-65. Vale also periodically convened an Independent Panel of Experts for Safety and Risk of Geotechnical Structure (“PIESEM”) to advise Vale on dam risks and safety management, which many Vale executives and employees attended. Id. ¶ 5. PIESEM produced reports that were distributed to management. Id.

According to Defendant Poppinga, the GRN reported to Vale's Executive Directors monthly, and Poppinga's subordinates reported to him weekly. Poppinga stated that "by having weekly meetings with these people, I had all the necessary information to know if there was a more serious problem" and that "I never refrained from passing anything along to Mr. Fabio Schvartsman on this matter." *Id.* ¶¶ 65-66.

4. *Issues with Dam 1 and Corporate Involvement*

On July 7, 2016, Defendant Poppinga emailed Cavalli, Campanha, Silmar Silva—Poppinga's direct subordinate and Vale's Director of Operations for the South East Corridor—and others, ordering the immediate shut down on Dam 1:

As per our discussion and having learned today of the doubt that arose related to B1 of Feijao mine we will immediately shut down production activities at this dam until we conclude all the tests and additional calculations that are in progress. I also ask you to assess reinforcement measures that can be implemented in a preventive manner.

Id. ¶¶ 67-69. At the time, Geoconsultoria Ltda ("Geoconsultoria") was preparing two static liquefaction analyses of Dam 1 that were finalized on July 15 and 26, 2016. *Id.* ¶¶ 70, 90. They found a range of factors of safety, including as low as 0.93. *Id.* ¶ 70. This allegedly suggests a roughly 50% probability of failure,² which should have triggered an "emergency level 3" and evacuation under Vale's Mining Dams Emergency Action Plan ("Action Plan" or "PAEBM"). *Id.* ¶¶ 10, 70.

On October 4, 2016, Poppinga emailed his subordinates following up on the failure to obtain DCEs for eight Ferrous Minerals tailings or sediment containment structures that "must be addressed immediately." *Id.* ¶ 71. Subsequent disclosures from Vale indicate that all dams in Poppinga's division received 2016 DCEs. *Id.* ¶ 72 (citing 2016 Sustainability Report).

² The parties disagree on Plaintiff's characterization of the Geoconsultoria reports. The reports indicate a factor of safety as low as 0.93, Def. Ex. 12, Dkt. No. 66-12, at 9-13, and recognize that Dam 1 was susceptible to liquefaction and "showed low safety coefficients" based on certain hypotheses. Def. Ex. 11, Dkt. No. 66-11, at 10-11.

In February 2017, Vale retained Potamos Engineering and Hydrology, Ltd. (“Potamos”) to prepare a Geotechnical Risk Management report analyzing Dam 1’s failure probability. Id. ¶¶ 52, 74. Vale’s maximum acceptable probability of a dam failure was 1×10^{-4} . Id. ¶ 74. Potamos’ report concluded that Dam 1’s failure probability was 3×10^{-4} , or three times Vale’s maximum risk tolerance. Id.

In November 2017, Potamos produced the results of Dam 1’s stability studies, finding a 1.06 factor of safety. Id. ¶ 88. Because the internationally recommended minimum factor of safety is 1.30,³ Potamos informed Vale and TÜV SÜD, Vale’s auditor, that the findings precluded issuing a DCE. Id. Potamos presented its findings and methodology at a PIESEM panel that month. Id. ¶ 89. The panel concurred with Potamos’ methodology and concluded that Vale’s method for verifying tailings dam stability was “not reliable” and “should cease.” Id.

Also in November 2017, Felipe Rocha, a Vale employee in Geotechnical Risk Management, presented a slideshow at a PIESEM meeting. Id. ¶ 75. The slideshow contained a series of risk curves showing multiple Vale dams in zones denoting unacceptable risk levels. Id. It stated that “VALE will start defining tolerability as the maximum level of individual risk should be *less than* 10^{-4} /year” and “[a]ll risks with probabilities *higher than* 10^{-4} /year are now included in VALE’s Business Risk Matrix and presented to the board of directors, CEO and Administrative Council.” Def. Ex. 13, Dkt. No. 66-13, at 30 (emphasis added); see also Compl. ¶ 77. The presentation set Dam 1’s risk probability as *equal* to 10^{-4} . Def. Ex. 13 at 18. In tolerability curves assessing Vale’s risk tolerance based on probability of collapse and potential

³ The parties dispute what minimum factor of safety applies to Dam 1. Brazilian law does not set a minimum factor of safety for undrained dams. Def. Ex. 9, Dkt. No. 66-9, at 12; MTD at 8. The internationally recommended standard and Vale’s internal standard are a minimum 1.3 factor of safety. Compl. ¶¶ 10 n.6, 80, 88, 89, 92, 118.

loss of life, Dam 1 fell in an unacceptable range with multiple other dams. Id. at 24-26; Compl. ¶¶ 75-77.

For Dam 1's next audit in March 2018, Vale approved a DCE relying on the method condemned by PIESEM and Potamos in November 2017. Id. ¶ 90. Tractebel Engenharia ("Tractebel") submitted the DCE using laboratory tests conducted by Geoconsultoria. Id.

In June 2018, Vale approved the submission of a stability declaration by TÜV SÜD for Dam 1. Id. ¶ 91. TÜV SÜD's testing calculated a factor of safety of 1.09. Id. Prior to submission, on May 13, 2018, Makoto Namba sent an internal email to his TÜV SÜD colleagues suggesting that TÜV SÜD was pressured by Vale's geotechnical department management to submit the stability declaration and that such practice was used by Vale with at least one other dam and auditor:

Marsilio is finishing the studies of liquefaction for Dam 1 at Córrego do Feijão, but everything indicates that it will not be approved, that is, the safety factor for the highest section will be lower than the minimum of 1.3. This way, strictly speaking, we cannot sign the Declaration of Stability for the dam, which has as consequence the immediate stop of all activities in the Córrego do Feijão mine. The coordinator Felipe [Rocha] called last Friday to know how the studies were going, and learning of the possibility of dam I not passing, he commented that all the efforts will be made to increase the safety factor, such as lowering the water table, remining the tailings, etc.... but they are all long-time solutions, that will take 2 to 3 years to show the desired effect. He also said that Dam Forquilha III, which is being studied by VOGBR, is not passing, but that the company will sign the DCE based on the same promises of improvement interventions. We will have the meeting with Vale tomorrow afternoon, where Marilene [Lopes, Vale Manager of Geotechnical Risks] and Cesar Grandchamp [Vale geologist within Southeast Planning and Programming Executive Management] will be present, and will question us if we will sign or not. The first answer that will be given is that the studies will still be audited by Leandro Moura, thus the results shown will not be definitive. Even Marsilio's study is not definitive yet. But as always Vale will throw us against the wall and ask: what if it doesn't pass, will you sign it or not? And for that, we will need the answer from Corporat[e], based on our technical positions. Not for tomorrow, but we need to discuss it internally, with urgency.

Id. ¶¶ 91-92. Additionally, at least as early as 2018, TÜV SÜD had an alleged financial conflict

of interest.⁴ Compl. ¶¶ 10-11.

On June 15, 2018, Campanha received an email stating that all of Vale's high-DPA⁵ dams obtained DCEs but warning that external auditors indicated that Dam 1 needed improvements such as a lower water table,⁶ removal of stored materials, or strengthening.⁷ Id. ¶ 83. Campanha forwarded the email to Cavalli stating: "In the material we will prepare for Peter [Poppinga], we will follow this line of thought." Id. Cavalli further forwarded the email to Silva. Id. ¶ 83 n.28. Silva sent it to his subordinates noting: "we will take all necessary and recommended measures." Id. The recommendations were never implemented. Id.

Documents pertaining to a June 18, 2018 PIESEM panel were seized from Campanha's office. Id. ¶ 78. On what appears to be the fifth slide of a PIESEM presentation titled "Structures with probability higher than 10^{-4} ," it states:

Dam I: internal erosion due to saturated zones located within the deposit, lack of internal drainage system in the initial and first-raised dikes. . . . Moreover, the structure has a history of high piezometric levels. Probability: 2×10^{-4}

Id. The document also contains handwritten notes indicating: "(1) all saturated tailings are susceptible to liquefaction; (2) Brazilian law does not set a minimum factor of safety against liquefaction but Vale's is greater than or equal to 1.3; (3) refer[] to the audit recommendations

⁴ Plaintiff does not elaborate on the nature of the conflict. A *Wall Street Journal* article quoted by Plaintiff states that "TÜV SÜD worked as both a consultant and an independent safety inspector" for Vale, which created a potential conflict of interest. Id. ¶ 213; Def. Ex. 29, Dkt No. 66-29, at 2.

⁵ DPA indicates the potential damage that would result from a dam's failure, including deaths and property and environmental damage. Compl. ¶ 82 n.26.

⁶ Water table, or piezometric level, is the level below which all pores, or gaps between particles within a soil or rock, are filled with water rather than air and water. See id. ¶ 82 n.27.

⁷ The email stated: "[H]owever, it is important to mention that some structures, despite the result, deserve full attention in meeting the relevant recommendations of the external auditors, in order to ensure, first, the safety of the structures, and also obtaining the DCE in the next External Audit (September/18). They are: Dam B1 at Feijao: Lower the phreatic surface in the structure and implement effective decommissioning works (controlled mining) and/or strengthen the structure. . . ." Id. ¶ 82.

from the Periodic Dam Safety Review; and (4) stat[ing] ‘-> make a good planning [sic] for B1. be careful.’” Id. ¶ 80. Campanha testified in a Brazilian investigation that risk assessment data and collapse probabilities for Dam 1 and all dams in the Southeast Corridor were known by Silva and Cavalli, Poppinga’s direct subordinates. Id. ¶ 81.

Upon Dam 1’s next safety audit in September 2018, Tractebel informed Vale that a DCE could not be issued because TÜV SÜD calculated a 1.09 factor of safety. Id. ¶ 94. Indeed, TÜV SÜD’s 2018 Dam Safety Audit reported problems with Dam 1 beyond a low factor of safety, including erosion, damaged and clogged drainage tubes, and missing or inconsistent monitoring data related to Dam 1’s water table and stability. Id. ¶ 94 n.31. Vale promptly replaced Tractebel with TÜV SÜD, who issued the DCE. Id. ¶ 94.

On October 18, 2018, recommendations from an October 1-5, 2018 PIESEM panel were sent to Silva, Cavalli, Campanha and others. The PIESEM panel concluded:

Dam 1 (Feijao) requires more research and field monitoring to identify and design more efficient complementary measures . . . in order to reduce the current risk. But in the meantime, efforts must continue to reduce the current level of the water table through horizontal drains and other drainage solutions.

Id. ¶ 84. Such drainage efforts were never attempted. Id.

The final PIESEM report included a discussion of the “liquefaction analysis and decommissioning of Dam 1.” Id. ¶ 85. Using data from 2005 and 2016, it concluded that “all saturated tailings were considered liquefiable,” and calculated a 1.1 factor of safety. Id. It stated:

[c]onsidering the results of the undrained slope stability analyses for Dam 1, based on undrained peak strength parameters, several restrictions, such as no traffic of heavy equipment, no blasting nearby, minimum beach distance and so on, were imposed at the dam, aiming to avoid triggering liquefaction.

Id. The report stressed the need to promptly lower Dam 1’s water level. Id. ¶ 86.

5. Subsequent Investigations and Disclosures

In mid-February 2019, after Dam 1’s collapse, TÜV SÜD wrote to the Minas Gerais state

prosecutor's office and Vale informing them that it retained experts to review previously issued DCEs for numerous Vale dams. Id. ¶ 95. TÜV SÜD advised that the experts could not confirm the stability of several dams, that the dams' factors of safety may be lower than previously indicated, and all activities on the dams should be "strictly avoided" due to the risk of failure. Id. Also after Dam 1's collapse, nine Vale dams declared emergency levels despite having previously been rated "low risk" in Vale's regulatory filings. Id. ¶ 96.

On March 1, 2019, the Minas Gerais state prosecutor's office, the Brazilian federal prosecutor's office, and the federal police department jointly sent a Prosecutors' Letter to Vale's board of directors. Id. ¶ 108. The letter stated, in part:

Vale SA's corporate geotechnical department, created after the Mariana disaster with the purpose of improving the risk management of dams, systematically acted to get stability declarations for dams with structures that did not reach the legal parameters established by the company, so much so that on more than one occasion the corporate geotechnical sector substituted external auditors that refused to give false declarations[.]

Id. The letter indicated that "the high officers of Vale SA were frequently fed with information related to the safety conditions of the structures under the company's responsibility." Id. ¶ 109.

It recommended immediate removal of nine executives from the Company, including Defendant Schvartsman, Defendant Poppinga, Cavalli, Silva, and Campanha, as well as removal of five employees from risk management and dam safety monitoring roles. Id. ¶¶ 110-111. On March 2, 2019, Defendant Schvartsman, Defendant Poppinga, Cavalli, and Silva submitted requests for leaves of absence, which were accepted. Id. ¶ 112. On March 7, 2019, Vale's Executive Board decided to comply with the other removal recommendations in the Prosecutors' Letter. Id.

The Brazilian Senate investigated Dam 1's collapse and released its findings and recommendations on July 2, 2019 ("Federal CPI"). Id. ¶ 113. It found that the collapse "was not an accident," and "Vale management and the board knew the risks and decided to take

them.” Id. ¶¶ 113-114. The report suggested that Vale reviewed and edited audit reports for Dam 1, concluding that there was a “faulty auditing process, on both sides, where the main objective seemed to be achieving the formal requirement, which was the stability report, rather than focusing on a rigorous analysis of dam safety.”⁸ Id. ¶ 87 n.30. The Federal CPI recommended indictments against Vale and certain executives, including Defendants Schvartsman and Poppinga. Id. ¶ 117.

The Federal CPI and Prosecutor’s Letter discussed three major incidents at Dam 1 that Vale failed to address. Id. ¶ 97. First, in June 2018, Vale attempted to lower Dam 1’s water level by installing deep horizontal drains, which auditors suggested to reduce the risk of liquefaction. Id. ¶ 98. During installation, water used in the drilling process did not return through the ducts and water pressure rapidly increased. Id. This can heighten the risk of liquefaction. Id. The installation was stopped, and water pressure returned to prior levels.⁹ Id. Vale took no further action to lower Dam 1’s water table despite TÜV SÜD’s warnings. Id. ¶ 100.

Second, Vale failed to address abnormal radar readings¹⁰ in March 2018, December 2018, and January 2019. Id. ¶ 102. In March 2018, abnormal radar readings were formally reported to Vale’s Geotechnical Operations team, but no concrete measures were taken in response. Id. ¶ 103. A January 18, 2019 email indicated that, beginning in November 2018 and accelerating through December 2018 and January 2019, radar measurements showed a “deformation” in Dam 1. Id. ¶ 102. Deformations indicate downward motion in a dam and can signal an imminent failure. Id.

⁸ For example, the Federal CPI referenced an August 28, 2017 email from Cristina Malherios (Vale engineer in Geotechnical Management) to Tractabel with substantive edits to a 2017 Dam 1 Audit Report. Id. ¶ 87 n.30.

⁹ A Minas Gerais State House of Representatives investigation found that Vale also failed to properly inform the Brazilian National Mining Agency about this incident. Id. ¶ 118.

¹⁰ Radar is used to detect structural changes in a dam that may not be visible to the naked eye. Id. ¶ 102.

Third, between January 10 and 24, 2019, Defendants failed to address inconsistent and missing readings in several Dam 1 piezometers (water pressure gauges). Id. ¶ 104. Vale was alerted by email on January 23, 2019 to several problematic January 10, 2019 readings but did not follow up. Id. According to Campanha and Vale’s Manager of Geotechnical Structures Management, the proper protocol under such circumstances was to immediately collect manual readings from monitoring instruments. Id. ¶¶ 105-107.

On September 12, 2019, the Minas Gerais House of Representatives released the results of its own investigation (“State CPI”). Id. ¶ 118. It found that Vale knew Dam 1 and other dams operated with factors of safety below the internationally recommended level of 1.3 and failed to take precautions in response to warnings. Id. This included failing to lower the dam’s water table, ignoring piezometers and radar alerts, and disregarding incoming water from a source upstream of Dam 1 that may have contributed to Dam 1’s increased water table. Id. The State CPI also determined that Vale continued to detonate explosives at the mine between June and September 2018 and on the day of collapse, in contravention of TÜV SÜD’s recommendation and the mine’s fire plans; the detonation may have been a trigger of Dam 1’s collapse. Id. The State CPI recognized that Dam 1’s Action Plan stated that it would take at least five minutes to escape the area below the Dam if a collapse occurred, but mud would reach that area in under a minute. Id. ¶ 119. And, even if evacuation would have been feasible, escape was impossible because warning sirens never sounded. Id. The State CPI recommended civil and criminal prosecutions against Vale and certain individuals, including Defendants Schvartsman and Poppinga. Id. ¶ 120.

6. Defendants’ Allegedly Materially False and Misleading Statements

Plaintiff alleges that during the Class Period, Defendants made numerous materially false

and misleading statements and omissions in Annual Reports, Sustainability Reports, Form 6-Ks, and publicly available presentations and articles. Specifically, Plaintiff contends that Defendants materially misrepresented or omitted facts related to: the risk that Dam 1 would fail; the sufficiency of Vale's dam risk management and sustainability policies and practices; Vale acting to obtain DCEs for dams that were unstable and did not satisfy Vale's purported safety standards; and Vale's third-party dam safety auditor having a conflict of interest as early as 2018 and issuing DCEs under fear of economic reprisal by Vale. *Id.* ¶¶ 125-200.

7. Allegations Regarding Economic Loss

Plaintiff alleges that Vale's materially false and misleading statements and omissions artificially inflated the price of its securities during the Class Period. Plaintiff points to a series of partial disclosures that allegedly revealed the truth to the market and resulted in a precipitous decline in the price of Vale Securities. *Id.* ¶¶ 201-203.

On January 25, 2019, multiple media outlets reported that Dam 1 had burst, and Vale confirmed the collapse and indicated the possibility of victims. *Id.* ¶ 204. Vale ADSs fell by \$1.20 per share (over 8%). *Id.* ¶ 205.

Over the weekend of January 26-27, 2019, and on Monday January 28, 2019, further details emerged about Dam 1's collapse. *Id.* ¶ 206. On Saturday, the federal Public Prosecutor's Office of Brazil ordered the formation of a task force to investigate the collapse. *Id.* ¶ 207. On Sunday, Vale stated that: 305 people were missing and 16 were dead, Brazilian judges granted R\$11 billion attachments to Vale's bank accounts, administrative sanctions were imposed by two regulatory agencies totaling R\$250 million, and Vale's board of directors voted to suspend dividends and set up committees to investigate the disaster and manage recovery efforts. *Id.* ¶ 208. On Monday, Vale ADSs dropped by \$2.46 per share (almost 20%). *Id.* ¶ 209.

On February 4, 2019, *Bloomberg* reported that Vale was halting some operations in its Brucutu mine per a Brazilian court order issued to help improve safety. Vale ADSs fell by \$0.42 per share (3.4%). *Id.* ¶ 210.

After the close of trading on February 5, 2019, it was reported that Vale would declare force majeure on certain iron ore supply contracts due to the court-ordered suspension of Brucutu mine operations. *Id.* ¶ 211. On February 6, 2019, *The Guardian* reported that Vale was warned of the likely rupture of Dam 1 given leaks and a TÜV SÜD report finding drainage problems and recommending installation of new water pressure monitors. *Id.* ¶ 212. *The Wall Street Journal* likewise reported that TÜV SÜD warned Vale “that faulty water drainage and monitoring systems represented a potential risk of failure” at Dam 1. *Id.* ¶ 213. Vale ADSs dropped by \$0.75 per share (over 6%). *Id.* ¶ 214.

LEGAL STANDARDS

I. Federal Rule of Civil Procedure 12(b)(6) Motion to Dismiss

To survive a motion to dismiss under Rule 12(b)(6), a complaint must contain sufficient factual allegations to state a claim that is “plausible on its face.” *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 570 (2007). “[T]hreadbare recitals of the elements of a cause of action, supported by mere conclusory statements, do not suffice.” *Harris v. Mills*, 572 F.3d 66, 72 (2d Cir. 2009) (quoting *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009)). The Court is required to accept all material facts alleged in the complaint as true and draw all reasonable inferences in the plaintiff’s favor. *Ashcroft*, 556 U.S. at 678. “In addition, [the Court] may consider any written instrument attached to the complaint, statements or documents incorporated into the complaint by reference, legally required public disclosure documents filed with the SEC, and documents possessed by or

known to the plaintiff and upon which it relied in bringing the suit.” ATSI Commc’ns, Inc. v. Shaar Fund, Ltd., 493 F.3d 87, 98 (2d Cir. 2007) (citation omitted).

II. Securities Fraud

Section 10(b) of the Exchange Act prohibits the “use or employ, in connection with the purchase or sale of any security . . . any manipulative or deceptive device or contrivance in contravention of such rules and regulations as the Commission may prescribe. . . .” 15 U.S.C. § 78j(b). Securities and Exchange Commission (“SEC”) Rule 10b–5, which implements Section 10(b), prohibits “mak[ing] any untrue statement of a material fact or [omitting] to state a material fact necessary in order to make the statements made, in the light of the circumstances under which they were made, not misleading[.]” 17 C.F.R. § 240.10b–5(b). To state a claim under these provisions, “a plaintiff must adequately allege the following elements: ‘(1) a material misrepresentation (or omission); (2) scienter . . . ; (3) a connection with the purchase or sale of a security; (4) reliance . . . ; (5) economic loss; and (6) loss causation, i.e., a causal connection between the material misrepresentation and the loss.’” Vladimir v. Bioenvision Inc., 606 F. Supp. 2d 473, 484 (S.D.N.Y. 2009), aff’d sub nom. Thesling v. Bioenvision, Inc., 374 F. App’x 141 (2d Cir. 2010) (quoting Dura Pharm., Inc. v. Broudo, 544 U.S. 336, 341-42 (2005)).

Section 10(b) claims are subject to two heightened pleading standards. First, under Federal Rule of Civil Procedure 9(b), a plaintiff must “state with particularity the circumstances constituting fraud or mistake.” In re Petrobras Sec. Litig., 116 F. Supp. 3d 368, 377 (S.D.N.Y. 2015) (quoting Fed. R. Civ. P. 9(b)). “The Second Circuit has interpreted Rule 9(b) to require that a complaint: ‘(1) specify the statements that the plaintiff contends were fraudulent, (2) identify the speaker, (3) state where and when the statements were made, and (4) explain why the statements were fraudulent.’” Id. at 377-78 (quoting Rombach v. Chang, 355 F.3d 164, 170 (2d

Cir. 2004)). Similarly, the Private Securities Litigation Reform Act (“PSLRA”) requires that a complaint “specify each statement alleged to have been misleading [and] . . . the reasons why” 15 U.S.C. § 78u–4(b)(1).

Second, “the PSLRA requires that plaintiffs ‘state with particularity [the] facts giving rise to a strong inference that the defendant acted with the required state of mind.’” Rombach, 355 F.3d at 176 (quoting 15 U.S.C. § 78u–4(b)(2)). “A complaint will survive . . . only if a reasonable person would deem the inference of scienter cogent and at least as compelling as any opposing inference one could draw from the facts alleged.” Tellabs, Inc. v. Makor Issues & Rights, Ltd., 551 U.S. 308, 324 (2007).

DISCUSSION

Vale argues that the allegedly materially false or misleading statements and omissions are inactionable because they are puffery, fall under statutory or judicial safe-harbor provisions, were not false or misleading when made, were not made with requisite scienter, or were not pled with particularity. The Court generally finds the Complaint to be sufficiently pled. Plaintiff substantially alleges that Defendants repeatedly and knowingly represented that Vale dams were stable, risks were properly monitored, and safety and sustainability were prioritized, when in actuality Defendants disregarded persistent red flags and acted to obtain DCEs in spite of them. Given the substantial number of statements at issue, the Court addresses the parties’ arguments below and includes an appendix indicating its findings as to each allegedly false or misleading statement.¹¹

¹¹ The Court’s determination as to whether a statement is actionable is not a ruling on admissibility for future evidentiary purposes.

I. The Complaint Alleges More than Corporate Mismanagement

In enacting Section 10(b), Congress did not intend to make actionable corporate mismanagement “without any deception, misrepresentation, or nondisclosure.” Santa Fe Indus., Inc. v. Green, 430 U.S. 462, 476 (1977). However, the “mere fact that the conduct . . . arguably constitutes mismanagement will not preclude a claim . . . if the defendant made a statement of material fact wholly inconsistent with known existing mismanagement or failed to disclose a specific material fact resulting from that mismanagement.” Freudenberg v. E*Trade Fin. Corp., 712 F. Supp. 2d 171, 192 (S.D.N.Y. 2010) (quoting In re Donna Karan Int’l Sec. Litig., 1998 WL 637547, at *10 (E.D.N.Y. Aug. 14, 1998)).

Vale argues that the Complaint is premised on Defendants failing to take appropriate action to prevent a dam collapse, which may amount to mismanagement but not securities fraud. See MTD, Dkt. No. 64, at 12. Yet Plaintiff alleges many misrepresentations and nondisclosures in pleading that Defendants made representations about Vale’s dam quality, commitment to safety and sustainability, and risk management and safety policies and practices that were plainly inconsistent with known facts. For instance, Vale’s 2017 Sustainability Report states that “Vale maintains the management of its dams in permanent alignment and updating with the good and strictest international practices, standards of which exceed the legal requirements” and “appl[ies] best practices pertaining to dam safety management.” Compl. ¶ 188. Yet, multiple third parties indicated to Vale that Dam 1’s factor of safety fell below the internationally recommended standard of 1.3. Id. ¶¶ 10 n.6, 70, 80, 88, 91-92, 118.¹² “Because Plaintiff[] allege[s] that

¹² Likewise, an April 10, 2018 Valor Econômico article states that Defendant Schvartsman described Vale’s tailings dams as “impressive” and “impeccable.” Id. ¶ 174. However, a November 2017 risk matrix, which was or should have been shown to him, documented several Vale dams with an unacceptably high risk of failure. Id. ¶¶ 75-77.

Defendants intentionally misled the public, rather than simply ma[de] bad business decisions, Plaintiff[] ha[s] pled more than mere mismanagement.” Freudenberg, 712 F. Supp. 2d at 193.

II. Plaintiff Alleges Material Misrepresentations or Omissions

A. Many Challenged Statements are Material

“To be ‘material’ within the meaning of § 10(b), the alleged misstatement must be sufficiently specific for an investor to reasonably rely on that statement as a guarantee of some concrete fact or outcome which, when it proves false or does not occur, forms the basis for a § 10(b) fraud claim.” City of Pontiac Policemen’s & Firemen’s Ret. Sys. v. UBS AG, 752 F.3d 173, 185 (2d Cir. 2014). “Materiality is a mixed question of law and fact, and [a] fraud claim may not properly be dismissed summarily on the ground that the alleged misstatements were not material unless they would have been so obviously unimportant to a reasonable investor that reasonable minds could not differ on the question of their importance.” Gross v. GFI Grp., Inc., 784 F. App’x 27, 29-30 (2d Cir. 2019) (quotations omitted).

Vale argues that most of the statements alleged to contain material misrepresentations or omissions are puffery. “It is well-established that general statements about reputation, integrity, and compliance with ethical norms are inactionable puffery, meaning that they are too general to cause a reasonable investor to rely upon them. This is particularly true where . . . statements are explicitly aspirational, with qualifiers such as ‘aims to,’ ‘wants to,’ and ‘should.’” City of Pontiac, 752 F.3d at 183 (quotations omitted); see also In re Xinhua Fin. Media, Ltd. Sec. Litig., 2009 WL 464934, at *8 (S.D.N.Y. Feb. 25, 2009) (“Soft adjectives,” “such as ‘strong,’ ‘experienced,’ and ‘capable’” may be puffery). Determining if a statement is puffery requires a fact-specific analysis; while a statement “might be mere puffery or insufficiently specific to

support liability in some contexts, it [may] clearly [be] a material misrepresentation” in others. Arkansas Teacher Ret. Sys. v. Bankrate, Inc., 18 F. Supp. 3d 482, 485 (S.D.N.Y. 2014).

i. Statements About Dam Conditions

While Vale’s allegedly misleading statements about dam conditions rely on adjectives that may be vague in other circumstances, many are sufficiently specific to survive a motion to dismiss given their context and clear inaccuracy. See, e.g., Novak v. Kasaks, 216 F.3d 300, 315 (2d Cir. 2000) (“[T]he complaint alleges that the defendants did more than just offer rosy predictions; the defendants stated that the . . . situation was ‘in good shape’ or ‘under control’ while they allegedly knew that the contrary was true. . . . [T]hese statements were plainly false and misleading.”); In re Countrywide Fin. Corp. Sec. Litig., 588 F. Supp. 2d 1132, 1144 (C.D. Cal. 2008) (Defendant’s “practices so departed from its public statements that even ‘high quality’ became materially false or misleading [T]o apply the puffery rule to such allegations would deny that ‘high quality’ has any meaning.”). For instance, Vale’s 2016 Annual Report states:

In May 2016, the state of Minas Gerais issued a decree ordering an immediate assessment of the stability conditions of the upstream dams and suspending new licensing procedures for building or heightening upstream dams, until the state environmental authority defined new rules and procedures. *We have conducted extraordinary audits on the stability conditions of our upstream dams, and no anomalies were identified.* We filed a report with local governmental authorities in September 2016. . . .

Compl. ¶ 135 (emphasis added); see also id. ¶ 157. Crediting Plaintiff’s allegations as we must, the statement is simply false. Nevertheless, Vale argues that the terms “extraordinary” and “anomalies” are too vague to be material. MTD at 14. In context, these terms signaled to investors that Vale’s upstream dams were assessed to be in good shape, while omitting that Defendant Poppinga ordered Dam 1 shut down due to “doubt that arose” and Geoconsultoria raised concerns about Dam 1’s stability in two liquefaction analyses. Compl. ¶¶ 68-70. For similar reasons, the Court rejects Vale’s baseless contention that representations that its dams

were “impeccable,” id. ¶ 174, and “all the structures in the Ferrous area are completely normal,” id. ¶ 195, were obviously immaterial. See MTD at 14, n.25, n.26.

ii. Statements About Dam Safety and Risk Management Policies and Practices

Vale is correct that some statements alleged to be misleading regarding safety and risk management policies are too general to be considered material. For example, a February 2017 6-K states under the heading “Risk Management”:

Vale considers that an effective risk management is key to support the achievement of the company objectives and to ensure the financial strength and flexibility of the company and the business continuity. Therefore, Vale has developed its risk management strategy in order to provide an integrated approach of the risks the company is exposed to, considering not only the risks generated by variables traded in financial markets (market risk) and those arising from liquidity risk, but also the risk from counterparties obligations (credit risk) and those relating to inadequate or failed internal processes, people, systems or external events (operational risk), among others.

Compl. ¶ 131; see also id. ¶¶ 132, 137, 167, 170, 171, 178, 181. Such vague language about Vale’s general attention to risk management cannot be reasonably understood as material, although it may ultimately have some probative force.

By contrast, other statements are not obviously immaterial. Vale characterizes language from its 2016 Sustainability Report as aspirational puffery:

At Vale, dedicated and qualified teams are assigned the responsibility of dam safety management. Vale aims to operate its dams using advanced engineering techniques, following strict controls, monitoring their performances in a systemic way, and evaluating safety conditions through annual external audits.

Id. ¶ 150; see also Reply, Dkt. No. 67, at 5. While the Court recognizes that “Vale aims to operate its dams using advanced engineering techniques” is aspirational, Vale neglects the remainder of the lengthy statement, which includes the following representations:

... The structures undergo visual inspections and are monitored by instruments that provide information on their structural behavior. The visual inspections are performed fortnightly and include a detailed checklist that allows for evaluating the conditions and changes in the structure.

The information gathered in inspections and in data obtained through monitoring instruments installed in the dams is recorded in auditable systems and analyzed by geotechnical engineers, who periodically evaluate if the conditions raised in the field and the readings from instruments are in accordance with the normal operating conditions of the structures.

In addition to inspection and monitoring routines, they undergo periodic maintenance, such as the cleaning of drainage and overflow structures, weeding, recovery of small erosions, restoration of slope coverage, among others, in order to ensure adequate conservation conditions for good performance. At Vale, all dams, even if no longer in operation, remain under its responsibility and are monitored, audited, and maintained normally under the same criteria and safety levels adopted during their operation.

Compl. ¶ 150. When read in full, this statement is neither aspirational nor vague. Indeed, if credited by the factfinder, it may just as easily be called a lie. Vale makes specific representations about its then-existing practices for monitoring dam stability that an investor could reasonably rely upon in assessing the strength of Vale’s risk management practices and the risk of a dam collapse. Compare Singh v. Cigna Corp., 918 F.3d 57, 63-64 (2d Cir. 2019) (contrasting actionable statement where “company described its compliance mechanisms in confident detail, including references to 24-hour monitoring teams, specific compliance equipment, and its clean compliance record,” with defendant’s “simple and generic assertions about having ‘policies and procedures’ and allocating ‘significant resources’”).¹³

iii. Statements About Commitment to Safety and Sustainability

“While certain statements, ‘viewed in isolation, may be mere puffery,’ when the statements are ‘made repeatedly in an effort to reassure the investing public’ about matters particularly important to the company and investors, those statements may become material to

¹³ While a closer call, the Court cannot yet say that statements about Vale’s operational risk mitigation are “so obviously unimportant to a reasonable investor” in assessing the risk of dam collapse, particularly where Defendants allegedly disregarded warnings about Dam 1’s stability and improperly obtained DCEs. Gross, 784 F. App’x at 29 (quotations omitted); see Compl. ¶¶ 133, 138, 168, 182.

investors.” In re BHP Billiton Ltd. Sec. Litig., 276 F. Supp. 3d 65, 79 (S.D.N.Y. 2017) (quoting In re Petrobras Sec. Litig., 116 F. Supp. 3d at 381) (collecting sources); see also In re Massey, 883 F. Supp. 2d 597, 617-18 (S.D.W. Va. 2012)) (statements material where “[d]efendants closely aligned their statements of commitment to safety to their productivity and success”).

While Vale’s statements about safety and sustainability may be generic, because it repeatedly emphasized its commitment to such priorities, Vale “put the topic at issue such that [the Court] cannot say that, as a matter of law, investors would not find [certain] representations material.” In re BHP, 276 F. Supp. 3d at 80 (quotations omitted). For example, Defendant Schvartsman indicated in a 2018 *Valor Econômico* article that “sustainability is part of the core business” of Vale, and “it is necessary for the mining company to be environmentally, socially, and economically sustainable for its survival.”¹⁴ Compl. ¶ 174. Defendant Osorio stated at the 2017 London Vale Day that “sustainability is one of the pillars to the company’s growth and prosperity” and safety is Vale’s “top priority.” Id. ¶ 164.¹⁵ Nevertheless, to the extent these statements contain purely aspirational language, such language is inactionable. See, e.g., id. ¶ 129 (“Zero harm targeted through all operations”), ¶ 147 (Vale “strives to achieve Zero

¹⁴ It seems from the Complaint that this language is a direct quote of the article, which paraphrases Defendant Schvartsman’s statements about sustainability.

¹⁵ See also, e.g., id. ¶ 127 (“we are driven by our commitment to safety to people and to preserve the environment”), ¶ 129 (“[s]ustainability is one of Vale’s strategic pillars”), ¶ 142 (listing “measures illustrating our commitment to sustainability”), ¶ 147 (“‘Life matters most’ permeates Vale’s activities”), ¶ 148 (“We know the size of our responsibility and believe that development is only sustainable when the Vale and society grow together, sharing the generated value. . . . Life matters most at work, at home, and in our communities. We are responsible for making this a reality.”), ¶ 153 (“[l]ife matters most;” “[p]rize our planet”), ¶ 161 (“safety is our top priority”), ¶ 163 (“We did a much more systematic planning and execution of all measures regarding sustainability, regarding both the environment and social and we are starting to do that.”), ¶ 184 (“We are committed to becoming a sustainability benchmark . . . based on . . . establishing a positive social, economic and environmental legacy in the places where we operate;” “We are committed to improving the health and safety of our workers;” listing “measures illustrating our commitment to sustainability”).

Damage”), ¶ 160 (entire statement aspirational), ¶ 193 (same).¹⁶

B. Plaintiff Alleges Many Misrepresentations Were False or Misleading When Made

Vale next argues that even if the statements are not puffery, the Complaint does not plead that they were false or misleading when made. Whether a statement is false or misleading “depends on the state of events when [the] statement is made, not on what happens later.” In re Vivendi, S.A. Sec. Litig., 838 F.3d 223, 262 (2d Cir. 2016) (citations omitted). However, “[t]he veracity of a statement or omission is measured not by its literal truth, but by its ability to accurately inform rather than mislead prospective buyers. . . . Some literally accurate statements can, through their context and manner of presentation, [become] devices which mislead investors.” Operating Local 649 Annuity Tr. Fund v. Smith Barney Fund Mgmt. LLC, 595 F.3d 86, 92 (2d Cir. 2010) (quotations and citations omitted).

Generally, Plaintiff pleads that certain statements were false or misleading when made. Statements about Vale’s dam stability, commitment to safety and sustainability, and robust safety and risk management policies and practices were allegedly misleading given that, at the same time, Vale failed to take action in response to repeated third-party warnings, red flags as to Dam 1’s stability, and the risk matrix indicating multiple dams with unacceptable risk probabilities. While Vale seeks to hide behind the fact that its dams obtained DCEs, these third-party certifications “gave [false] comfort to investors” when they were allegedly tainted by Vale’s meddling. Meyer v. Jinkosolar Holdings Co., 761 F.3d 245, 251 (2d Cir. 2014).

However, certain alleged statements are not false or misleading. Vale’s generic warnings as to the plethora of risks facing the Company cannot be considered misleading simply because

¹⁶ Defendant Schvartsman’s statement to Vale employees about Vale’s commitment to sustainability, id. ¶ 155, is not actionable where it was first published after Dam 1’s collapse and thus could not have been relied upon. See Def. Ex. 15, Dkt. No. 66-15, at 1-2.

they omit details as to the degree to which each of the numerous risks may have materialized.¹⁷

See Compl. ¶¶ 139, 140, 179, 180. Statements that merely acknowledge legal obligations, id. ¶ 177, and the existence and role of committees, see id. ¶¶ 132, 137, 143, 167, 172, 185, make no misleading commitments or representations. See DoubleLine Capital LP v. Construtora Norberto Odebrecht, S.A., 413 F. Supp. 3d 187, 211 (S.D.N.Y. 2019) (finding statements “reflect[ing] the company’s obligations” inactionable.). Finally, Plaintiff fails to allege that Vale’s representations about its “investments” in dams, id. ¶ 190, and Vale’s receipt of “official notifications” from the National Department of Mineral Productions that were all “meritless or concerned only formal errors,” id. ¶ 192, are untrue; nothing in these statements requires additional details about Vale’s dam safety, risk management, or sustainability practices to be complete.

C. Defendants Had a Duty to Disclose Certain Purported Omissions

Vale claims that Defendants had no duty to disclose the purported omissions. “[W]here an allegation of fraud is based upon nondisclosure, there can be no fraud absent a duty to speak. Once a corporation has elected to speak, however, Rule 10b–5 mandates that its speech must be truthful, accurate, and complete.” In re Bristol Myers Squibb Co. Sec. Litig., 586 F. Supp. 2d 148, 160 (S.D.N.Y. 2008) (quotations and citations omitted); see also Matrixx Initiatives, Inc. v. Siracusano, 563 U.S. 27, 44 (2011) (“§ 10(b) and Rule 10b–5(b) do not create an affirmative duty to disclose any and all material information. Disclosure is required under these provisions only when necessary ‘to make . . . statements made, in the light of the circumstances under which they were made, not misleading.’”) (quoting 17 CFR § 240.10b–5(b)).

¹⁷ The Court emphasizes that these disclosures do not insulate Defendants from other potentially misleading statements that gave false impressions as to the likelihood of a disclaimed risk materializing. See, e.g., Meyer, 761 F.3d at 251 (“Although this statement warned of a financial risk to the company from environmental violations, the failure to disclose then-ongoing and serious pollution violations would cause a reasonable investor to make an overly optimistic assessment of the risk. A generic warning of a risk will not suffice when undisclosed facts on the ground would substantially affect a reasonable investor’s calculations of probability.”); infra Section II.C.

General statements about Vale’s dams or risk management protocols would not necessitate disclosure of the specific problems with each of their several hundred dams. See Acito v. IMCERA Grp., Inc., 47 F.3d 47, 52-53 (2d Cir. 1995) (Where defendant “is a world-wide company engaged in heavily regulated businesses that produce over a thousand products in over thirty countries[, i]t would be unduly burdensome and impractical to publicly disseminate the results of every inspection of every plant.”). For instance, Vale references a transcript available on its website of a July 28, 2016 conference call, in which Poppinga is asked about alternatives to upstream tailings dams given a potential ban. Poppinga responds: “we must say that Vale -- we don’t have those dams. Right? We don’t have -- we practically have no upstream dams in our operation continuously.” MTD at 18-19; Compl. ¶ 125. This statement makes no representations about dam safety or risk management such that it would require further disclosures to be complete.

Plaintiff nevertheless alleges material omissions as to other statements, including:

- “With regard to risk management, tailings dams are highly relevant, being subjected to periodic safety audits and also to operating and monitoring procedures to assess geotechnical stability.” Compl. ¶ 158 (May 2017 Form 6-K).
- “At the end of the year, the area ended another cycle of external dams auditing, in which 100% of the audited structures were certified to be in stable condition, physically and hydraulically.” Id. ¶ 189 (2017 Sustainability Report).
- “In 2017, external audits were carried out on 107 structures in the Ferrous area, located in Brazil. All of them had their physical and hydraulic stability certified, and were issued Statements of Stability Condition (DCE, acronym in Portuguese) by the responsible auditors.” Id. ¶ 191 (2017 Sustainability Report).
- “[A]ll of Vale’s iron ore dams are safe and operating within normal limits” and “100% of Vale’s iron ore dams have their Stability Dam Declaration issued by the External Auditors.” Id. ¶ 197 (December 11, 2018 ESG Webinar).
- “The Dam I had Stability Condition Statements issued by TÜV SÜD . . . on 6/13/18 and 9/26/18 The dam had a Safety Factor in accordance with the world’s best practices Both of the abovementioned stability declarations attest to the physical and hydraulic safety of the dam.” Id. ¶ 199 (January 28, 2019 6-K).

These statements represent that Vale's dams were deemed safe and subject to reliable third-party audits. Vale's omission of alleged facts suggesting that there were known issues with dams and that DCEs were unduly influenced and certified for dams with insufficient factors of safety obviously paint an incomplete and misleading picture about the stability of Vale dams.

Vale's general warnings about operational risks do not change this assessment. See in re Fannie Mae, 742 F. Supp. 2d 382, 405-06 (S.D.N.Y. 2010) (statements about company's strong risk management practices were pled as materially misleading where chief risk officer internally complained of "inadequate regard for the control process" notwithstanding company warnings to investors about "weaknesses with respect to risk management"). While Vale generally warned investors about the possibility of a dam collapse and breach of risk management protocols, see Compl. ¶¶ 139, 179-180, it also made representations as to the strength of its safety and risk management practices. For example, the 2017 Sustainability Report states:

Vale maintains the management of its dams in permanent alignment and updating with the good and strictest international practices, standards of which exceed the legal requirements. . . . International specialists and external auditors recognize Vale as a model for risk management in the global industry. The strictness adopted is a demonstration of the our [sic] understanding that efficient dam management is a vital aspect not only for for [sic] Vale operations and its workforce, but also for the communities surrounding these structures. . . .

[S]pecialized teams are dedicated to controlling Vale's dams, deploying qualified professionals at the operation sites to take care of the structures day-to-day, and at the offices to develop projects, studies and analyses to assure safety and reduce structural risks . . . In addition to applying best practices pertaining to dam safety management, Vale submits its structures to audits conducted by specialized external consultants, and rigorously complies strictly with applicable legislation.

Another highlight this year was implementing the International Panel of Experts on the Ferrous area, composed of international and national technicians who work in risk management, geotechnics and water resources. The panel's purpose is to evaluate governance, processes, studies, projects and technical analyses of geotechnics and hydrology.

Id. ¶ 188. Plaintiff sufficiently alleges that this statement “lulls the reader into a false sense of security” as to the strength of Vale’s risk management and safety practices where it omitted facts such as: dams did not comply with the international 1.3 factor of safety recommendation or Vale’s internal 1×10^{-4} failure probability, id. ¶¶ 10 n.6, 70, 74-75, 80, 88-89, 91, 118; at least one DCE was based on methodologies condemned by Potamos and the PIESEM panel, id. ¶¶ 89-90; and external auditors were unduly influenced to issue DCEs, id. ¶¶ 91-94. In re Oxford Health Plans, Inc., 187 F.R.D. 133, 141 (S.D.N.Y. 1999); see also Meyer, 761 F.3d at 251 (“One cannot, for example, disclose in a securities offering a business’s peculiar risk of fire, the installation of a comprehensive sprinkler system to reduce fire danger, and omit the fact that the system has been found to be inoperable, without misleading investors.”). Similarly, statements in the 2016 Sustainability Report emphasizing updates to Action Plans and a Geotechnical Risk Management’s database to manage dam inspections, audits, and technical information, Compl. ¶ 151, may be misleading where Dam 1’s Action Plan was allegedly not followed and that far from managing risks, the Geotechnical Risk Management Department acted to obtain DCEs for unstable dams. See id. ¶¶ 10, 91-93, 108.

D. The PSLRA and Bespeaks Caution Doctrine Do Not Preclude Claims

The bespeaks caution doctrine and the PSLRA safe-harbor provision make inactionable forward-looking statements accompanied by adequate cautionary language. See, e.g., Singh v. Schikan, 106 F. Supp. 3d 439, 451 n.9 (S.D.N.Y. 2015) (“Under the bespeaks caution doctrine, ‘[a] forward-looking statement accompanied by sufficient cautionary language is not actionable because no reasonable investor could have found the statement materially misleading.’”) (quoting Iowa Pub. Employees’ Ret. Sys. v. MF Global, Ltd., 620 F.3d 137, 141 (2d Cir. 2010)); Slayton v. Am. Exp. Co., 604 F.3d 758, 765-66 (2d Cir. 2010) (Under the PSLRA, “a defendant

is not liable if the forward-looking statement is identified and accompanied by meaningful cautionary language”). “Under either doctrine, [a]s a general rule, statements whose truth cannot be ascertained until some time after they are made are forward-looking statements.” In re Vale S.A. Sec. Litig., 2017 WL 1102666, at *24 (S.D.N.Y. Mar. 23, 2017) (quotations omitted). Where a “statement may contain some elements that look forward and others that do not, . . . forward-looking elements may be severable from non-forward-looking elements.” In re Vivendi, 838 F.3d at 246 (quotations and citations omitted).

Additionally, under the PSLRA and bespeaks caution doctrine, cautionary language must be substantive, specific, and accompany the forward-looking statement. See, e.g., Slayton, 604 F.3d at 772; Singh, 106 F. Supp. 3d at 451 n.9. Cautionary language need not be in the same document as the allegedly forward-looking statement where incorporated by reference, including in references to SEC filings. See In re Aceto Corp. Sec. Litig., 2019 WL 3606745, at *6 (E.D.N.Y. Aug. 6, 2019) (citations omitted). But, the protections do not apply if defendants knew that their statements were false or misleading when made. See In re Vivendi, 838 F.3d at 245 (PSLRA does not apply if “plaintiff . . . prove[s] that [the forward-looking statement] was made with actual knowledge that it was false or misleading.”) (quoting Slayton, 604 F.3d at 766); Rombach, 355 F.3d at 173 (“The bespeaks caution doctrine does not serve if it is abused or gamed. Cautionary words about future risk cannot insulate from liability the failure to disclose that the risk has transpired.”).

Given factual allegations that defendants knew their statements were false or misleading when made, the Court cannot at this stage conclude that they are protected by the PSLRA safe harbor or bespeaks-caution doctrine. Further, while Vale contends that several statements are forward-looking, it offers excerpted lines from broader statements that include representations as

to present or historical facts and are, at best, severable. See MTD at 22-23. For example, Vale points to the statement: “We are constantly looking to adapt and evolve” Id. at 22 (quoting Compl. ¶ 127). The entire statement reads as follows:

As I think you all know, we are driven by our commitment to safety to people and to preserve the environment. Moreover, we understand that it is important to all of our stakeholders, including the people in place[s] where we operate. We are constantly looking to adapt and evolve by building [on] what we have seen, experience[d] and learn[ed]. On that regard, on November 5, [2015] Samarco accident, we complete one year anniversary. And since then, we stood by our commitment to do what is right.

Compl. ¶ 127. The Court cannot conclude that the entirety of this statement, with its present-tense language, is forward-looking, particularly given the reference to a prior dam collapse and representation that Vale has already “stood by [its] commitment to do what is right,” id.

III. Plaintiff Alleges Defendants Acted with Scienter

To plead scienter, a plaintiff must “state with particularity facts giving rise to a strong inference that the defendant acted with the required state of mind.” 15 U.S.C. § 78u–4(b)(2)(A). “Scienter can be established . . . by alleging facts to show either (1) that defendants had the motive and opportunity to commit fraud, or (2) strong circumstantial evidence of conscious misbehavior or recklessness. Conscious misbehavior or recklessness, in turn, can be established by showing, *inter alia*, that defendants knew facts or had access to information suggesting that their public statements were not accurate.” In re Centerline Holding Co. Sec. Litig., 380 F. App’x 91, 93 (2d Cir. 2010) (quotations omitted). “[I]t is possible to plead corporate scienter by pleading facts sufficient to create a strong inference either (1) that someone whose intent could be imputed to the corporation acted with the requisite scienter or (2) that the statements would have been approved by corporate officials sufficiently knowledgeable about the company to know that those statements were misleading.” Loreley Fin. (Jersey) No. 3 Ltd. v. Wells Fargo Sec., LLC, 797 F.3d 160, 177 (2d Cir. 2015) (quotations omitted). The relevant

inquiry “is whether *all* of the facts alleged, taken collectively, give rise to a strong inference of scienter, not whether any individual allegation, scrutinized in isolation, meets that standard.”

Slayton, 604 F.3d at 774 (quoting Tellabs, Inc., 551 U.S. at 322-23).

Vale argues that Plaintiff does not establish scienter as it merely “allege[s] that the individual defendants . . . had or should have had knowledge of certain facts contrary to their public statements simply by virtue of their high-level positions, their general responsibility for monitoring [the company’s] activities, and their access to inside information.” Johnson v. Siemens AG, 2011 WL 1304267, at *15 (E.D.N.Y. Mar. 31, 2011); see also MTD at 28.

Plaintiff, however, makes “specific allegations of various reasonably available facts, or red flags, that should have put the officers on notice that the public statements were false.” In re Refco, 503 F. Supp. 2d at 649 (quotations omitted). These include warnings from auditors, low factor of safety assessments, problematic dam behavior, risk curves showing multiple dams with unacceptable failure probabilities, and alarming PIESEM findings as to Dam 1’s stability.

As to each individual defendant, “a reasonable person would deem the inference of scienter cogent and at least as compelling as any opposing inference one could draw from the facts alleged.” Tellabs, Inc., 551 U.S. at 324. Plaintiff’s allegations show that dam safety was not a subject limited to a discrete number of company engineers or experts; they demonstrate that Vale’s executives were directly and intimately involved with dam safety, presumably before the Mariana dam collapse and certainly after it. Defendant Poppinga is included and referenced in emails discussing issues with Dam 1, and he testified as to his familiarity with the dealings of the Geotechnical Management team. Compl. ¶¶ 10, 23, 64, 68, 70-72, 82-83. Defendant Schvartsman made public representations suggesting familiarity with dam conditions and likely viewed the risk matrix, and Defendant Poppinga testified that Defendant Schvartsman was kept

abreast of “serious problem[s].” Id. ¶¶ 7, 9, 23, 66, 155. Defendant Siani headed the GRN unit that analyzed dam risks and maintained the risk matrix, and allegedly received information on dam risks not only in this role, but also in monthly reports issued by the GRN to the Executive Risk Committee that Siani chaired. Id. ¶¶ 38, 64-65. As CEO, Ferreira similarly received the monthly risk reports from GRN and made representations in the aftermath of Mariana suggesting knowledge about dam stability. Id. ¶¶ 36, 38, 64-65, 127. Finally, while somewhat weaker, Plaintiff sufficiently alleges scienter as to Osorio given that he allegedly received monthly risk reports from GRN and made public representations as to Vale’s commitment to safety and sustainability. Id. ¶¶ 64-65, 161, 164. Because Plaintiff alleges scienter as to senior leadership, scienter may also be imputed to the corporation. See In re Marsh & McLennan Companies, Inc. Sec. Litig., 501 F. Supp. 2d 452, 481 (S.D.N.Y. 2006).

Finally, Vale’s assertion that audit reports refute an inference of scienter is unpersuasive. The cases Vale cites suggest good faith reliance on reports. See, e.g., Foley v. Transocean Ltd., 861 F. Supp. 2d 197, 219 (S.D.N.Y. 2012) (finding certification that a rig was in safe condition following an audit undermined claim that defendant was aware of equipment issue prior to a blowout). By contrast, Defendants’ allegedly improper interference with audits and the auditor’s conflict of interest undermines the claim that DCEs provided independent assurances.

IV. Plaintiff Alleges Loss Causation

Under the PSLRA, a plaintiff must plead loss causation. See 15 U.S.C. § 78u–4(b)(4). Loss causation “is the causal link between the alleged misconduct and the economic harm ultimately suffered by the plaintiff.” Emergent Capital Inv. Mgmt., LLC v. Stonepath Grp., Inc., 343 F.3d 189, 197 (2d Cir. 2003) (citation omitted). To establish loss causation, “a plaintiff must allege . . . that the *subject* of the fraudulent statement or omission was the cause of the actual loss

suffered, *i.e.*, that the misstatement or omission concealed something from the market that, when disclosed, negatively affected the value of the security.” Lentell v. Merrill Lynch & Co., 396 F.3d 161, 173 (2d Cir. 2005) (quotations omitted). “[T]he vast majority of courts in this [Circuit] have required that [pleading] loss causation only meet the notice requirements of Rule 8.” Loreley, 797 F.3d at 183 (quoting Wilamowsky v. Take-Two Interactive Software, Inc., 818 F. Supp. 2d 744, 753 n.7 (S.D.N.Y. 2011)).

Loss causation may be pled by alleging a corrective disclosure or materialization of the risk. A corrective disclosure “requires an allegation that the market reacted negatively” in response to a statement that “revealed an alleged misstatement’s falsity or disclosed that allegedly material information had been omitted.” Wilamowsky, 818 F. Supp. 2d at 751 (quotations omitted). Materialization of the risk applies “[w]here the alleged misstatement conceals a condition or event which then occurs and causes the plaintiff’s loss.” In re Initial Pub. Offering Sec. Litig., 544 F. Supp. 2d 277, 289 (S.D.N.Y. 2008) (quotations omitted). “[T]he risk that caused the loss [must be] within the zone of risk *concealed* by the misrepresentations” and foreseeable. In re Omnicom Grp., Inc. Sec. Litig., 597 F.3d 501, 513 (2d Cir. 2010) (quoting Lentell, 396 F.3d at 173). Plaintiff need not establish at the motion to dismiss stage that no other factors caused the decline in stock price. See Carpenters Pension Tr. Fund of St. Louis v. Barclays PLC, 750 F.3d 227, 233 (2d Cir. 2014).

Plaintiff alleges that the value of Vale Securities fell after each of the following disclosures, and sufficiently pleads loss causation as to most of them:

- January 25, 2019: media outlets report on Dam 1 burst, and Vale confirms the collapse and indicates the possibility of victims. Compl. ¶ 204.

Plaintiff’s claims rest not on Defendants’ representing that Vale dams could never collapse, but on misleading investors about the significant probability of a collapse occurring.

Therefore, that Dam 1 collapsed, without more, does not reveal to the public any previously undisclosed misrepresentation. It may, however, constitute a materialization of the risk. Dam's 1 collapse was within the "zone of risk" concealed by Vale's misrepresentations as to the likelihood of a Vale dam collapsing. And, the resultant loss—a decline in stock price—was foreseeable.

- January 26-28, 2019: disclosures about federal Public Prosecutor's Office of Brazil investigation, confirmations of number of people dead and missing, judicial attachments to Vale's bank account, administrative sanctions, suspension of Vale dividends, and Vale investigations into Dam 1 collapse. *Id.* ¶¶ 207-209.

Plaintiff fails to plead that these reports qualify as corrective events. That Vale was subject to investigations, attachments, and administrative sanctions after the collapse is not necessarily indicative of any alleged misrepresentation or fraud.

- February 4, 2019: *Bloomberg* reports that Vale is halting some operations in its Brucutu mine pursuant to a Brazilian court order issued to improve safety. *Id.* ¶ 210.

Plaintiff sufficiently alleges loss causation as to this disclosure. That a court intervened to "improve safety" could be considered a partial disclosure as to Vale's misrepresentations about the stability of its dams and strength of its dam safety policies and practices.

- February 6, 2019: reports that Vale would declare force majeure on certain iron ore supply contracts as a result of the court-ordered suspension of Brucutu mine operations surfaced after close of business on February 5, 2019. The next day, *The Guardian* reports that Vale was warned about the likely rupture of Dam 1 given leaks and a TÜV SÜD report finding drainage problems and recommending installation of new water pressure monitors. *The Wall Street Journal* likewise reports that TÜV SÜD warned Vale "that faulty water drainage and monitoring systems represented a potential risk of failure" for Dam 1 and that TÜV SÜD had a conflict of interest and should not have certified Dam 1. *Id.* ¶¶ 211-213.

Plaintiff pleads loss causation only as to the alleged disclosures on February 6, 2019. The February 5, 2019 report of force majeure suggests nothing about the veracity of Vale's statements as to safety, sustainability, or risk management. However, the February 6, 2019 reports that Vale was warned of leaks, drainage, and monitoring system problems in Dam 1

revealed to the market alleged misrepresentations as to dam stability and safety and risk management practices. Allegations that TÜV SÜD should not have issued a DCE and had a conflict of interest also call into question Vale's representations about its compliance and the integrity of dam audit processes. While Vale argues that the articles are speculative, "[a]llegations that the market reacted negatively to an opinion or speculation which in fact exposes the [alleged] falsity of defendants' representations can be sufficient to plead loss causation." In re Winstar Commc'ns, 2006 WL 473885, at *14 (S.D.N.Y. Feb. 27, 2006).

V. Plaintiff States Claims with Requisite Particularity

Vale argues that Plaintiff fails to plead its claims with sufficient particularity. The Court rejects this argument. As described earlier, a complaint must satisfy the PSLRA's particularity requirement to succeed on a Rule 10b-5 claim, including "demonstrat[ing] with specificity why and how each statement is materially false or misleading." Boca Raton Firefighters & Police Pension Fund v. Bahash, 506 F. App'x 32, 38 (2d Cir. 2012) (quotations omitted). A complaint "marked by lengthy block quotes followed by pro forma reasons why the statements quoted are allegedly false[] fails to state a claim. . . . [Plaintiff must] identif[y] statements and omissions, describe[] relevant predicate events, and allege[] how those events make the statements and omissions false or misleading." Constr. Laborers Pension Tr. for S. California v. CBS Corp., 2020 WL 248729, at *5 (S.D.N.Y. Jan. 15, 2020) (quotations and citations omitted).

The Complaint specifies the statements and omissions alleged to be false or misleading and the relevant facts to support its position. It introduces each statement by identifying the context and speaker and provides the relevant language, emphasizing the allegedly problematic portions in bold, italics, and underline. The Complaint then follows each statement with an

explanation of what Defendants allegedly knew or recklessly disregarded, what information should have been disclosed, and why.

In its reply brief, Vale also argues that Plaintiff impermissibly and “almost entirely” relies on the Brazilian CPI reports “without being held responsible for certifying that they are supported by some factual basis” Reply at 1 (quoting VNB Realty, Inc. v. Bank of Am. Corp., 2013 WL 5179197, at *7 (S.D.N.Y. Sept. 16, 2013)). However, “counsel [need not] conduct a personal investigation into every factual contention in the complaint . . . [and] may rely ‘on documentary evidence that qualifies as a reliable source for pleading purposes.’” In re Tronox, Inc. Sec. Litig., 2010 WL 2835545, at *6 (S.D.N.Y. June 28, 2010) (quoting In re New Century, 588 F. Supp. 2d 1206, 1220-21 (C.D. Cal. 2008) (allowing “allegations drawn from the Examiner’s Report because the allegations are derived from documentary evidence”)). The CPI reports were produced by reliable government authorities in the course of investigation. For pleading purposes at least, Plaintiff may rely on them.

CONCLUSION

If proven, Plaintiff’s allegations would show a deliberate and concerted effort to mislead the public. The allegations plainly reveal that Defendants fabricated their statements about Vale’s safety and risk management practices, Vale’s commitment to safety and sustainability, and the stability of Vale’s dams. Defendant Vale’s motion to dismiss is DENIED.

SO ORDERED.

Dated: Brooklyn, New York
May 20, 2020

/s/ Raymond J. Dearie

RAYMOND J. DEARIE
United States District Judge

APPENDIX

Statements Adequately Plead as Actionable (in whole or part)	Inactionable Statements
Compl. ¶¶ 127, 129, 133, 135, 138, 142, 147, 148, 150, 151, 153, 157, 158, 161, 163, 164, 168, 174, 182, 184, 188, 189, 191, 195, 197, 199.	Compl. ¶¶ 125, 131, 132, 137, 139, 140, 143, 155, 160, 167, 170, 171, 172, 177, 178, 179, 180, 181, 185, 190, 192, 193.